RCE IH₀

Request for Continued Examination (RCE) Transmittal

Address to:
Mail Stop RCE
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P.O. Box 1450
Alexandria, VA 22313-1450

Application Number	09/919,302
Filing Date	July 31, 2001
First Named Inventor	Sarlay
Art Unit	3623
Examiner Name	Johnna Stimpak
Attorney Docket Number	IEX 2051000

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

1. **Submission required under 37 CFR 1.114** Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

   a. ☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

      i. ☐ Consider the arguments in the Appeal Brief or Rely Brief previously filed on _____

      ii. ☐ Other _____

   b. ☑ Enclosed

      i. ☑ Amendment/Reply   iii. ☐ Information Disclosure Statement (IDS)

      ii. ☐ Affidavit(s)/ Declaration(s)   iv. ☐ Other _____

2. **Miscellaneous**

   a. ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

   b. ☐ Other _____

3. **Fees** The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

   a. ☐ The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. _____

      i. ☑ RCE fee required under 37 CFR 1.17(e)

      ii. ☑ Extension of time fee (37 CFR 1.136 and 1.17)

      iii. ☐ Other _____

   b. ☑ Check in the amount of $ 880.00 _____ enclosed

   c. ☐ Payment by credit card (Form PTO-2038 enclosed)

   WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Name (Print/Type)	David H. Judson	Registration No. (Attorney/Agent)	30,467
Signature		Date	August 23, 2004

CERTIFICATE OF MAILING OR TRANSMISSION

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Name (Print/Type)	David H. Judson		
Signature		Date	August 23, 2004

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Sarlay et al.

Serial Number: 09/919,302

Filing Date: July 31, 2001

Art Unit: 3623

Examiner: Johnna Stimpak

For: **METHOD FOR FORECASTING AND MANAGING MULTIMEDIA CONTACTS**

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Commissioner for Patents
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PRELIMINARY AMENDMENT ACCOMPANYING REQUEST FOR CONTINUED EXAMINATION

This paper is submitted in association with a Request for Continued Examination under 37 C.F.R. § 1.114. Pending claims 37-51 were finally rejected in the parent case under § 103(a) as being unpatentable in view of the "product of Pipkins" referred to as "Maxima Advantage" in the following Business Wire product announcements and an associated Pipkins press release:

"Mustang.com and Pipkins Join Forces In eService Workshop Management" – dated December 23, 1999, Business Wire;

"Pipkins Teams with Mustang.com to Enable Call Center Agents to Integrate Phone Call and Email Function" – dated March 16, 2000, Business Wire; and

"Maxima Advantage" Press Release, January 2000, from Pipkins, Inc., with an identified URL as: http://www.tmcnet.com/articles/ccsmag/0100/0100labs1.htm.

As stated in the Advisory Action mailed July 23, 2004, the Examiner's position is that the record now has sufficient evidence to support the contention that the Maxima

Advantage product was available for sale in January, 2000, and that the Pipkins' product had certain features or functions of the claimed invention. For the reasons set forth below, Applicants respectfully disagree with this position.

The pending rejection is traversed. Reconsideration and favorable action are respectfully requested.

A. Any rejection based merely on the "product of Pipkins" is legally unsupportable

The inclusion of the Pipkins press release in the Advisory Action did not rectify the deficiency in the Examiner's original rejection (mailed April 26, 2004), which rejection was premised on the so-called "product of Pipkins." As previously pointed out, the Business Wire press releases do not disclose any substantive details about the alleged "product of Pipkins" as relates to the claimed invention (e.g., subsections (b)-(c) of claim 37), and the newly-cited Pipkins press release is even less probative on the point. (Indeed, the press release has fewer technical detail about how the alleged "product of Pipkins" works than the Business Wire accounts -- which have almost none). Thus, even if the "product of Pipkins" did exist in January 2000, there still is no evidence in this record that any such product had the specific functionality required by the pending claims – clauses (b)-(c) in claim 37 being merely representative. This remains the key deficiency in the Examiner's rejection, and there is nothing in the Advisory Action that now rises to the limit of a *prima facie* case.[1]

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[1] The Examiner bears the initial burden to establish a *prima facie* case of obviousness. *In re Rijckaert*, 9 F.3d 1351, 1532 (Fed. Cir. 1993). A *prima facie* case is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art to make the proposed combination or other modification. *In re Lintner*, 458 F. 2d. 1013, 1016 (C.C.P.A. 1972). Further, the conclusion that the claimed subject matter is *prima facie* obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. *In re Fine*, 837 F.2d 1071, 1074 (Fed.Cir. 1988). Section 103 rejections must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The Examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual

Stated another way, the Examiner does not meet the Office's burden to establish a *prima facie* case of obviousness by arguing that the two Business Wire accounts and the Pipkins press release about the Maxima Advantage "product" (the press accounts themselves being silent as to how the product actually works) means that the product has (or must have) the features of the claimed invention. Neither the Business Wire accounts nor the Pipkins' press release is prior art as to the actual structural and functional characteristics of the Maxima Advantage product unless those characteristics are expressly described in the published documents, and there are not, for the reasons set forth below.

B.   The Business Wire accounts and the Pipkins Press Release do not describe generating a forecast of contacts to handle

As described in paragraph [3] of the written description, workforce management systems are known in the art, and it is also known that such systems generate forecasts of call received volumes and call handling times based on historical data to determine how much staff will be needed at different times of the day and week, and that such systems then create schedules that match the staffing to the anticipated needs. Applicants are not attempting to claim this prior art approach. In contrast, the present invention is claiming an improvement to such schemes whereby an additional level of forecasting is done – a forecast of contacts to handle – and this unique forecast is neither disclosed nor suggested by the art of record, most especially in the cursory statements set forth in the product accounts describing the Pipkins Maxima Advantage product.

The prior art approach (including that implemented by Pipkins Maxima Advantage) is to merely schedule staffing to handle a given multimedia contact within a given interval in which the contact is received. This is no different from the well-known way in which call center workforce management systems handled incoming telephone calls. It is not, however, the approach described or claimed in the present invention. Rather, according to representative claim 37, the inventive technique actually calls for the creation of a separate, new forecast – a forecast of the number of contacts to handle – and this forecast is based on a given service level goal "describing a maximum amount of time that may occur between

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basis for the rejection. *In re Warner*, 379 F. 2d 1011, 1017 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968).

receipt of a given contact and handling of the given contact." According to the inventive technique, "for a given future time period of the forecast," the given service level goal is used "to identify a number of time periods over which the contact load in that given future period may be distributed." A "given function" is then applied to the "contact load to distribute it over a given set of the identified number of time periods" to create the forecast of the number of contacts to handle. Only then does the workforce management system determine how much staff will be needed at different times of the day and week (claim 37 does not require this additional, known step).

Table I in paragraph [29] of the written description illustrates this unique creation of a separate "contacts to handle" forecast. There is nothing in the prior art that remotely discloses or suggests this feature, which is positively recited in each pending claim.

In particular, the December 23, 1999 Business Wire release just states that the Pipkins Maxima Advantage system enables the user to "forecast e-mail customer service representative (CSR) staffing requirements" and that the system can be used "to intelligently manage [an] e-mail customer service workforce, ensuring service level goals are met in the most cost-effective manner possible." (See, Business Wire Release, at paragraphs 4-5). This is not a description of the specific "contacts to handle" forecast generation technique that is affirmatively described in claim 37.

Likewise, the March 16, 1999 Business Wire release makes the same statements and goes on to say that "the integrated system will provide Pipkins with incoming e-mail information such as e-mail offered, average handling time, and service level achieved. This information will enable a supervisor to staff e-mail response handling more efficiently." (See, Business Wire Release, at paragraphs 14-15). This is a mere description of the use of historical data to generate staffing requirements; it is not a description of the specific "contacts to handle" forecast generation technique that is actually recited in claim 37.

The January 2000 Pipkins press release (in describing the product's Forecasting capability) simply states that the product "uses Merlang algorithms when calculating staffing levels, even when using multiple agent skill sets, and correlates marketing

activities with projected call volumes." (See, Release, Features section). The reference is otherwise silent as to any "forecasting" functions or features of the product and, of course, there is no technology or technical description set forth in the release itself.

As can be seen, there is nothing explicit in the references cited by the Examiner that would support a *prima facie* case of obviousness as to the specific subject matter - taken as a whole - that is positively recited in each pending independent claim. Then how is the "product of Pipkins" different from the prior art call center forecast, if at all? The references themselves are silent on this point. According to the description of the "Maxima Advantage" product on the current Pipkins' Web site, however, "[f]orecasting for multi-media events (email, fax, web chat, etc.) is principally the same as for calls." (See, http://www.pipkins.com/multimedia.asp, emphasis supplied). A copy of this page is attached to this response.

Moreover, one can easily visualize the differences between using the prior art approach (such as suggested by Pipkins) and the present invention. As described in paragraph [29] of the written description, Table 1 below is a chart illustrating how the "contacts to be handled" forecast can be generated. As described there, the contacts received are propagated to the receiving and/or succeeding periods based upon the relative propagation factors for each period. (This is the technique that is positively recited in subsection (c) of independent claim 37, for example). As seen in the Table, reproduced below, there are eight periods, P1-P8, and the contacts received are indicated by the bold number 10 under the P1 column, the number 20 under the P2 column, the number 30 under the P3 column, the number 40 under the P4 column, and the number 50 under the P5 column. (These are representative values, of course). Now, assume the service goal (*i.e.*, the percentage of contacts received in a given period that is desired to have handled within a specified number of succeeding periods) for contacts received in a period is to handle 100% by the end of the fifth succeeding period. (These are steps (a)-(b) in claim 37 in a representative embodiment). Also shown are the propagation factors for each period P1-P8. The propagation factors are a relative indication of the number of contacts that may be handled within a period, and preferably they are based in whole or in part on the number of agents available, agent availability (the amount of time that an agent or group of agents

may allocate to service contacts), excess capacity (the amount of time that an agent or group of agents has to handle additional work), minimum and maximum backlog goals, agent productivity (the average handling time for a contact type), agent schedule adherence, and the like. (These are features described, for example, in dependent claim 40).

For example, according to the inventive technique (step (c) in independent claim 37, for example), the 10 contacts received in period P1 are propagated as shown over periods P1-P6, the 20 contacts received in period P2 are propagated as shown over periods P2-P7, the 30 contacts received in period P3 are propagated as shown over periods P3-P8, the 40 contacts received in period P4 are propagated as shown over periods P4-P9, and the 50 contacts received in period P5 are propagated as shown over periods P5-P10, in this example rounded to the nearest tenth. Also shown are the propagation factors for each period P1-P8.

Table 1

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
Contacts Received/ Propagated	**10** 0.5	1	1.5	2	2.5	2.5				
		20 1.7	2.5	3.3	4.2	4.2	4.2			
			30 3.3	4.4	5.6	5.6	5.6	5.6		
				40 5.7	7.1	7.1	7.1	7.1	5.7	
					50 8.9	8.9	8.9	8.9	7.1	7.1
Total Propagated	0.5	2.7	7.3	15.4	28.3	28.3	25.8	21.6	12.8	7.1
Propagation Factors for Each Period										
	1	2	3	4	5	5	5	5	4	4

At most, the prior art simply suggests taking historical information about the number of contacts received and then taking the same algorithms used to forecast calls to then forecast the number of contacts that are expected to be received in each given (e.g., 15

or 30 minute) time interval. In contrast, the present invention seeks claim coverage on a method that uses a first forecast (e.g., the contacts that will be received in each such time interval) as input to a method that generates a secondary forecast that finds the best time to schedule handling of the contacts within a specific time range service level goal. The first forecast is identified, e.g., in the claim 37 preamble, as "a forecast of contact load expected to occur in each of a set of future time periods within a given future time range."

In the example table above, the prior art would simply create a first forecast of the contacts to be received in each interval as follows:

{P1: 10, P2: 20, P3: 30, P4: 40, P5: 50}.

These contacts would then be used with average handling time to determine the staff needed using known methods. In this regard, it should also be appreciated that the prior art assumes that these contacts (as identified above) will then be handled in real time. In contrast, the method disclosed and claimed in the present invention is addressed to "contacts that are not required to be serviced by contact center agents in real time," (as described in the claim preamble). The method of forecasting according to the present invention provides significant advantages in that it enables contact centers to reduce staffing costs, as such contacts need not be handled in real time.

Claim 37 distinguishes over the prior art technique by specifically describing the steps implemented to create the second forecast. In particular, the claim describes the steps that take place between the first forecast and the step of calculating the staff requirements – namely, the creation of a second forecast of when is the best time to schedule handling of the contacts within a specific time range goal. Continuing with the example above, using the claimed invention results in the second forecast to use to create staffing requirements. In particular, instead of: {P1: 10, P2: 20, P3: 30, P4: 40, P5: 50}, as would be the case if the prior art approach were used, execution of the method recited in claim 37 would generate the following representative forecast:

{P1: 0.5, P2: 2.7, P3: 7.3, P4: 15.4, P5: 28.3}.

In considering the question of obviousness, the Examiner must consider the subject matter of each independent claim, taken as a whole. See, 35 U.S.C. § 103(a). As is self-evident, representative claim 37 describes a set of specific method steps that the Examiner

has failed to locate in any of the cited art, and Pipkins itself describes the "product of Pipkins" in the same light as the prior art forecasting techniques. But, for the reasons set forth above, that is not the claimed invention. Stated plainly, there is no statement or suggestion in the art the sets forth any of the three method steps now positively recited. Thus, the three (3) cited product accounts – in of themselves – are insufficient to give rise to a *prima facie* case. Moroever, before the "product of Pipkins" itself is deemed prior art, the Examiner must establish that the product actually had the characteristics positively recited in the claims, and the Web page reference cited above (although not prior art itself) shows that at least the Maxima Advantage "product of Pipkins" described on that Pipkins' Web page today is using the forecasting technique used for calls – not a "contacts to handle forecast." The product accounts, as noted above, are virtually silent on this key point and, thus, there is no factual or legal basis for the Examiner to conclude that the "product of Pipkins" (as opposed to the descriptions) meets the standard of a *prima facie* showing either, especially in view of the way Pipkins now describes that product on its own Web site.

Stated simply, the evidentiary record – taken as a whole – fails to disclose or suggest any of the actual steps recited in claim 37. Claim 37 thus describes patentable subject matter.

Independent claim 46 is likewise patentable for the same reasons. This independent claim includes the further step of repeating the steps (a)-(c) (like in claim 37) on an iterative basis for additional given future time periods with the future time range to distribute the contact load for each additional given time period. Once again, the undersigned challenges the Examiner to find any such disclosure, suggestion or text in the three cited articles.

The dependent claims 38-45 and 47-51 are patentable for the reasons advanced with respect to their parent claim.

A Notice of Allowance is respectfully requested.

Respectfully submitted,

By: _____

David H. Judson, Reg. No. 30,467

ATTORNEY FOR APPLICANTS

PIPKINS INC. *Workforce Management Solutions*

Multi-media Support

Maxima Advantage is ready for the continually evolving multi-media call center. It was engineered from the beginning to accept and process data from any type of CRM media. Whether you have email, FAX, or just phone traffic - Maxima Advantage is ready to handle your scheduling and forecasting needs.
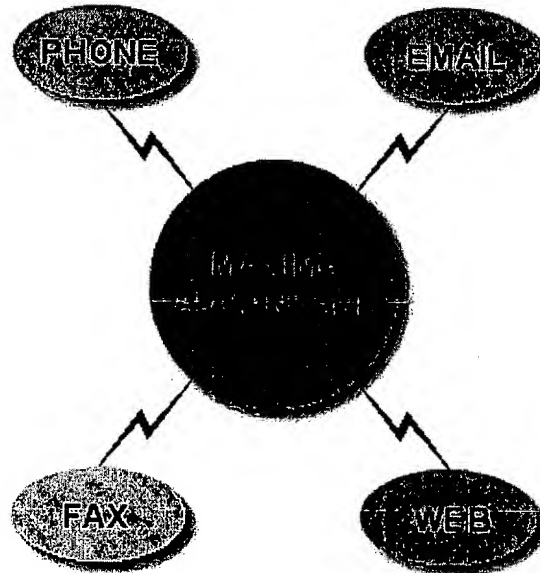
Forecasting for multi-media events (email, fax, web chat, etc.) is principally the same as for calls.

The forecast must take into account the trends, growth, special events, distribution, and so on. This information may be collected automatically from the email routing system. Email routing packages provide the necessary reports on email received, time to handle, etc.

Pipkins flexible report parsing system enables the integration of multi-media data collection and forecasting into the overall call center forecasts.